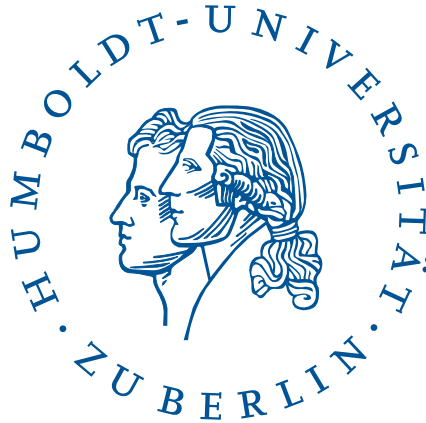


# Asymptotic Behavior of Lévy Walks

## BACHELOR THESIS

for attaining the academic grade of  
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# 1. Introduction

hat er das jetzt geaendert?

mean squared displacement (MSD)  $\langle x^2 \rangle$

## 2. Theoretical background and methodology

- 2.1 Theory of continuous time random walks
- 2.2 The generalized Lévy walk model
- 2.3 Direct approach for calculating the mean squared displacement
- 2.4 Numerical simulation of the model

### **3. Analytical Calculations**

## 4. Results and Discussion

## 5. Conclusions

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# Bibliography

- [1] NANDAN, Dhritiman ; PLEFKA, Jan ; SCHLOTTERER, Oliver ; WEN, Congkao: Einstein-Yang-Mills from pure Yang-Mills amplitudes. In: *JHEP* 10 (2016), S. 070. [http://dx.doi.org/10.1007/JHEP10\(2016\)070](http://dx.doi.org/10.1007/JHEP10(2016)070). – DOI 10.1007/JHEP10(2016)070

# Selbstständigkeitserklärung

Hiermit versichere ich, dass ich die vorliegende Arbeit selbständig verfasst und keine anderen als die angegebenen Quellen und Hilfsmittel verwendet habe.

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Ort, Datum

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